

*DASYURUS HALLUCATUS* GOULD, 1842 (MAMMALIA,  
MARSUPIALIA): PROPOSED CONSERVATION BY THE  
SUPPRESSION OF *MUSTELA QUOLL* ZIMMERMANN,  
1783. Z.N.(S.)2472

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Since the establishment of the name *Dasyurus hallucatus* Gould, 1842, the Australian Northern Quoll has been known by no other specific name. For most of the time it has been used in the original combination *Dasyurus hallucatus*, and during the last 58 years, also in the alternative combination *Satanellus hallucatus*. This stable use of *hallucatus* is now threatened by the earlier name *Mustela quoll* Zimmermann, 1783.

2. The name *Mustela quoll* Zimmermann was first used in 1777 by Zimmermann in *Specimen Zoologiae geographicae* . . . , a work subsequently rejected for zoological nomenclature by the Commission because it is not wholly binomial (Opinion 257, 1954). The name was later established by Zimmermann in *Geographische Geschichte des Menschen* . . . (1778–1783).

3. *Mustela quoll* Zimmermann, 1783, is based wholly upon a vernacular name, Quoll, and a description, in Hawkesworth's account of the voyage of Captain James Cook to the eastern coast of Australia in 1770 in H.M.S. Endeavour, Bark (Hawkesworth, 1773). The species is described in volume 2 of *Geographische Geschichte des Menschen* . . . under the vernacular name Quoll that was used by Hawkesworth. Quoll is a representation of a word in the Aboriginal Guugu Yimidhirr language. It applies to a species of quoll inhabiting the vicinity of the mouth of the Endeavour River where the Endeavour was beached for a period, undergoing repairs (see Mahoney & Ride, 1984).

4. Zimmermann, 1780 (zweiter band, p. 312) describes the Quoll thus, following the entries for *Mustela*, under the heading Unbestimmtere Arten,

'(f) Der Quoll. Banks in Hawkesw. Account. Vol. III. p. 626.

Der Quoll gleicht dem Iltis; der Rücken ist braun mit Weiss gefleckt; der Bauch ganz weiss. Man fand es auf Neusüdwallis, der Ostküste von Neuhollland.'

In the succeeding volume (1783, dritter band, p. 181) Zimmermann lists

'(3) Der Quoll, *Mustela Quoll*. Neu-Süd-Wallis.'

By this use, in both volumes, of the same vernacular name that is used for no other species in the work, the description is linked unmistakably within the same work (although in different volumes published in different years) with the scientific name.

5. Professor L. B. Holthuis has drawn our attention to the similarity between this case and that dealt with in Opinion 11 (1910, *Smithson. Inst.*

Publ. No. 1938, pp. 17–18) in which consideration is given to the method of type selection for genera used by P. A. Latreille, 1810 in the work '*Considérations générales sur l'ordre naturel des animaux composant les classes des crustacés, des arachnides, et des insectes; avec un tableau méthodique de leurs genres, disposés en familles*'.

Latreille's work consists of 3 parts. The second part lists and describes the genera and gives their names in both Latin and the vernacular (French).

6. The third part is entitled '*Table des genres avec l'indication de l'espèce qui leur sert de type*' and gives a list of the names, in French, of the genera each followed by the name, in Latin, of, in most cases, a single species. The Commission held that the citation of the species name with the vernacular name of the genus (but linked with the scientific name and description of the genus, in the second part of the work, by the use of the vernacular name in both places) constituted a valid designation of type species.

7. There is little doubt that the name *Mustela quoll* Zimmermann, 1783, based on Quoll, is an available name for the species currently known as *Dasyurus hallucatus* Gould, 1842. No type specimen is known to be extant for *M. quoll* Zimmermann, 1783, but there is a drawing of the Quoll made during Cook's voyage and this, combined with the linguistic evidence from the distribution of the Guugu Yimidhirr language, which is within the range of *Dasyurus hallucatus*, leave little doubt as to its taxonomic identity (see Mahoney & Ride, 1984).

8. Although, as far as is known, *Mustela quoll* Zimmermann has never previously been applied to the species currently called *Dasyurus hallucatus*, it is not a forgotten name. Between 1934 and 1954 it was widely, but mistakenly, used for another species of *Dasyurus*, *D. viverrinus* (Shaw, 1800), occurring in south-eastern Australia. Even the widely used *Grzimek's Animal Life Encyclopedia* (Heinemann, 1972) currently uses it in that sense. When attributed, the name *M. quoll* was credited to Zimmermann, 1777. Its use has become progressively less common since the Commission rejected Zimmermann's 1777 work in Opinion 257 (see para. 2).

9. As stated above, Mahoney & Ride, 1984, have shown that the association with *D. viverrinus* can no longer be upheld. Accordingly, we conclude that the introduction into the literature of the specific name *quoll*, in a different sense, would introduce confusion.

10. Although the name *Dasyurus quoll* for *D. viverrinus* has virtually ceased because of Opinion 257, the use of the name in popular works as a name derived from an Australian Aboriginal language has firmly attached it to that species as its vernacular name (see Corbet & Hill, 1980, p. 12 and Strahan, 1981, p. 31), and the mistaken association of Hawkesworth's published description with *D. viverrinus* continues in the literature (see Troughton, 1974, p. 39).

11. Because of a mistaken belief that *M. quoll* was not subsequently made available by Zimmermann in *Geographische Geschichte des Menschen* ... (see Ride, 1964, pp. 14,15), it has not been used from that later work.

Although technically not a forgotten name, because of its use from the earlier work, it has now re-emerged from a state of *de facto* suppression in a new use that would both upset stability (see para. 1), and universality and cause confusion (see paras. 8, 9 and 10).

12. Unfortunately, the case cannot be dealt with under the special provisions of Art. 79b. Accordingly, we must seek a ruling from the Commission under the normal exercise of the plenary powers (Art. 79a), that the name *Mustela quoll* Zimmermann, 1783, as published in volumes 2 and 3 of *Geographische Geschichte des Menschen*.. (1780–1783), be partially suppressed (i.e. suppressed for the purpose of the Principle of Priority only).

13. In the event that the Commission takes the view that *Mustela quoll* is not available from Zimmermann *Geographische Geschichte des Menschen*.. (1780–1783) and, therefore, does not require suppression, the name is next used by Bechstein, 1800 (*Thomas Pennant's allgemeine Uebersicht der vierfüssigen Thiere* . . . , pp. 392, 693) in a manner that would make it available. Bechstein describes 'Der Quoll', calls it '*Mustela Quoll*', refers to both Hawkesworth, 1773 and Zimmermann's 1778–1783 'geogr. Zool.' giving volume and page numbers as well as providing a description derived from a quoll described under the vernacular name Spotted Martin in 'Stockdale's Bot. Bay' (Phillip, A. 1789. *The voyage of Governor Phillip to Botany Bay*. . . , p. 276). This species (distinct from those referred to as *Dasyurus viverrinus* and *D. hallucatus* in this application) is the species currently known as *Dasyurus maculatus* (Kerr, 1792).

14. *Dasyurus maculatus* (Kerr, 1792) is not threatened by Bechstein's usage. Moreover it is our view that Bechstein's usage is no more than a re-use (and an erroneous application) of Zimmermann's *Mustela quoll* from *Geographische Geschichte des Menschen* . . . . However, if the latter is not an available name, then there is no doubt that *M. quoll* of Bechstein becomes an available name in its own right and poses a threat to stability of *Dasyurus hallucatus* Gould. No further action by the Commission would be required because we would remove that threat by selecting a neotype conformable with Bechstein's description that would make *Mustela quoll* sensu Bechstein, 1800, a junior objective synonym of *Dasyurus maculatus* (Kerr, 1792).

15. In summary the International Commission on Zoological Nomenclature is requested to:

- (1) use its plenary powers to suppress the specific name *quoll* Zimmermann, 1783, as published in the binomen *Mustela quoll*, for the purposes of the Principle of Priority but not for those of the Principle of Homonymy;
- (2) place the specific name *hallucatus* Gould, 1842 as published in the binomen *Dasyurus hallucatus* on the Official List of Specific Names in Zoology;
- (3) place the specific name *quoll* Zimmermann, 1783 as published in the binomen *Mustela quoll* and as suppressed under the plenary powers in (1) above, on the Official Index of Rejected and Invalid Specific Names in Zoology.

## REFERENCES

- BECHSTEIN, J. M. 1800. *Thomas Pennant's allgemeine Uebersicht der vierfüssigen Thiere. Aus dem Englischen übersetzt und mit Anmerkungen und Zusätzen versehen.* Zweyter band. Verlage des Industrie-Comptoir's, Weimar, pp. i-xi, pp. 323-768.
- CORBET, G. B. & HILL, J. E. 1980. *A world list of mammalian species.* British Museum (Natural History), London. viii + 226 pp.
- GOULD, J. 1842. Characters of a new species of *Perameles*, and a new species of *Dasyurus*. *Proc. zool. Soc. London.* 1842, pp. 41-42.
- HAWKESWORTH, J. 1773. *An account of the voyages undertaken by the order of His Present Majesty for making discoveries in the Southern Hemisphere, and successively performed by Commodore Byron, Captain Wallis, Captain Carteret, and Captain Cook, in the Dolphin, the Swallow, and the Endeavour: drawn up from the Journals which were kept by the several Commanders, and from the Papers of Joseph Banks, Esq. Illustrated with cuts, and a great variety of charts and maps relative to countries now first discovered, or hitherto but imperfectly known.* Volume 3, W. Strahan & T. Cadell, London, pp. 411-799 (1st edition), pp. 1-395 (2nd edition).
- HEINEMANN, D. 1972. Marsupial carnivores, marsupial anteaters, and marsupial moles (Tasmanian devil and Tasmanian wolf by Bernhard Grzimek), pp. 70-95 in *Grzimek's Animal Life Encyclopedia*. Volume 10 (Mammals 1). English edition. H. C. B. Grzimek (Editor-in-chief). Van Nostrand Reinhold Company, Melbourne. 627 pp.
- INTERNATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE. 1945 Opinion 11. *Smithson. Inst. Publ.* No. 1938, pp. 17-18.
- 1954. Opinion 257. *Opin. Decl. int. commn. zool. Nomencl.* vol. 5, pp. 231-244.
- LATREILLE, P. A. 1810. *Considérations générales sur l'ordre naturel des animaux composant les classes des crustacés, des arachnides, et des insectes; avec un tableau méthodique de leurs genres, disposés en familles.* F. Schoell, Paris. 444 pp.
- MAHONEY, J. A. & RIDE, W. D. L. 1984. The identity of Captain Cook's quoll, *Mustela quoll* Zimmermann, 1783 (Marsupialia: Dasyuridae). *Aust. Mammal.*, vol. 7, pp. 57-62.
- PHILLIP, A. 1789. *The voyage of Governor Phillip to Botany Bay; with an account of the establishment of the Colonies of Port Jackson & Norfolk Island; compiled from authentic papers, which have been obtained from the several Departments. To which are added, the Journals of Lieuts. Shortland, Watts, Ball, & Capt. Marshall; with an account of their new discoveries embellished with fifty five copper plates, the maps and charts taken from actual surveys, & the plans & views drawn on the spot, by Capt. Hunter, Lieuts. Shortland, Watts, Dawes, Bradley, Capt. Marshall, &c. J. Stockdale, London.* 6 + ii + viii + x + xii + 298 + lxxiv pp.
- RIDE, W. D. L. 1964. A list of mammals described from Australia between the years 1933 and 1963 (comprising newly proposed names and additions to the Australian faunal list). *Bull. Aust. mamm. Soc.*, No. 7, suppl., pp 1-15.
- STRAHAN, R. 1981. *A dictionary of Australian mammal names. Pronunciation, derivation, and significance of the names; with biographical and bibliographical notes.* Angus & Robertson Publishers, Sydney. xxiv + 196 pp.

- TROUGHTON, E. 1974. *Furred animals of Australia*. Revised and abridged edition (10th edition). Angus & Robertson (Publishers) Pty Ltd, Sydney. xviii + 314 pp.
- ZIMMERMANN, E. A. W. 1777. *Specimen Zoologiae geographicae, Quadrupedum Domicilia et Migrationes sistens. Dedit, tabulamque mundi zoographicam adjunxit*. Theodorum Haak, et Socios, Lugduni Batavorum. xxiv + 686 pp.
- 1778. *Geographische Geschichte des Menschen, und der allgemein verbreiteten vierfüßigen Thiere, nebst einer hieher gehörigen Zoologischen Weltcharte*. Erster band. Weygandschen Buchhandlung, Leipzig. 308 pp.
- 1780. *Geographische Geschichte des Menschen, und der vierfüßigen Thiere*. Zweiter band. Enthält ein vollständiges Verzeichniss aller bekannten Quadrupeden. Weygandschen Buchhandlung, Leipzig. 432 pp.
- 1783. *Geographische Geschichte des Menschen, und der allgemein verbreiteten vierfüßigen Thiere, mit einer hiezu gehörigen Zoologischen Weltcharte*. Dritter band. Weygandschen Buchhandlung, Leipzig. 278 + 32 pp.